

Refrigeration Equipment and Refrigeration Appliances

Definition/Description

The following are the major categories of refrigeration equipment and appliances regulated for “safe disposal”, prior to going to scrap or to a landfill, by 40 CFR 82 Subpart F Parts 150-166. Definitions applicable to this part are at the end of this article.

- **Household Refrigeration.** Refrigerators and freezers intended primarily for household use, though they may be used outside the home (e.g., in offices, etc.).
- **Other Refrigerated Appliances.** Dehumidifiers; vending machines; icemakers; water coolers.
- **Residential Air Conditioning.** Window units; packaged terminal air conditioners; central air conditioners; light commercial air conditioners; heat pumps.
- **Retail Food.** Small reach-in refrigerators and freezers; refrigerated display cases; walk-in coolers and freezers; large parallel rack systems. (Includes equipment found in supermarkets, convenience stores, restaurants, and other food service operations).
- **Motor Vehicle Air Conditioners (MVAC) or MVAC-like appliances. See guidance under Vehicles. (NOTE:** This part of the regulation only applies to the “safe disposal” if the vehicle with MVAC goes to scrap or landfill. USEPA has published separate regulations at 40 CFR 82, Subpart B on “servicing” of MVACs or MVAC-like equipment. DRMOs do not service MVACs.
- **Transportation Refrigeration.** Refrigerated ship holds; truck trailers; railway freight cars; other shipping containers.
- **Commercial Comfort Air Conditioning.** Centrifugal chillers; reciprocating chillers; screw chillers.
- **Commercial Comfort Air Conditioning. (Other than Trucks and Autos).** Centrifugal chillers, reciprocating chillers; screw chillers.
- **Cold Storage Warehouses.**
- **Industrial Process Refrigeration.** Includes but is not limited to industrial ice machines and ice rinks.
- **Military Equipment.** The regulation does not apply to devices containing and using refrigerants that are designed for and used solely in a military application. Such devices are excepted unless their system of parts in that equipment is identical to equipment used for household or commercial purposes.

Substitute refrigerants (hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). As of November 5, 1995, the Clean Air Act Amendments of 1990, Section 608 c.2, prohibit the intentional release or venting of HFC and PFC substitute refrigerants (for example, HCFC 134a) to the environment. Substitute refrigerants from refrigeration equipment or appliances must also be recovered from unserviceable/scrap property by the generator prior to turn-in or if turned-in as usable/serviceable, recovery arrangements via an MOU should be in place if the property fails RTDS. See DRMS web site (at <http://www.drms.dla.mil>) - Go to turn-in, then click on Hazardous, choose Refrigerant.

Policy References/Authority

The Clean Air Act Amendments of 1990, Section 608.c, prohibit the intentional venting or releasing of ozone depleting refrigerants or their blends or substitute refrigerants to the environment. The USEPA Refrigerant and Emission Reduction regulation of 1993, at 40 CFR 82, Subpart F, established recovery and recycling requirements for ozone depleting refrigerants removed or recovered during the service, maintenance, repair and disposal of refrigeration equipment and appliances. This includes a "safe disposal requirement" requiring the recovery of refrigerants from refrigeration equipment and appliances prior to final disposal as scrap or to a landfill, by technicians using certified equipment. Violations of the Clean Air Act (CAA) and of USEPA regulations carry civil or criminal penalties and fines. DOD disposal policy is at DOD 4160.21-M, Chapter 10, Attachment 1, Item 24.

USEPA REGULATIONS DO NOT APPLY OVERSEAS. Host nation environmental laws and regulations may regulate this type of property; therefore, DRMOs overseas may have different or special turn-in requirements to comply with the DOD Executive Agent Final Governing Standards (FGS) and host nation laws and regulations applicable overseas.

Unique Processing Information/How to Manage

Receiving:

See below for Turn-in Flow Chart.

Usable/Serviceable Refrigeration Equipment/Appliances: Property in Supply Condition Code A, B, C, or D may be turned in with the refrigerant intact in the equipment/appliance. **A MOU is not required upon turn –in for refrigeration equipment in A,B,C or D Supply Condition Code.** These items will be processed for RTDS; if the items fail RTDS and become scrap, the refrigerant must be recovered prior to downgrading to scrap or sending to a landfill. **Edited 22 Apr 2009.**

- ETID/DTID and property must be marked with "NOTICE: CONTAINS REFRIGERANT. Per 40 CFR 82.156(f) Refrigerants must be recovered before final disposal of this item." for identification as usable, for proper handling and storage, and for RTDS processing. (See Sample Labels)
- Establish a MOU (see sample below) with generating activity to remove or fund the removal of the refrigerant, if the items fail RTDS and are downgraded to scrap. DRMOs will notify the generating activity if the equipment/appliance(s) fail RTDS and must go to scrap or disposal in a landfill. DRMOs located on a base where the host has certified technicians and certified equipment for removal of refrigerants, will ensure:
 - A signed statement, confirming the refrigerant removal, in accordance with USEPA regulations, accompanies the item (see DRMS Form 2016/sample statement), and the equipment is ready for downgrade to scrap or for sending to a landfill.
 - If necessary, DRMOs may have to make arrangements for local area commercial technicians to remove the refrigerant prior to downgrading the property to scrap or sending to a landfill for final disposal. A request should be made to the generating activity to fund this service or to reimburse the DRMO.

Scrap/Unserviceable Refrigeration Equipment/Appliances: Property in Supply Condition Code E, F, G, H or S may be turned in without refrigerant for going to a scrap dealer or landfill.

- ETID/DTID and equipment marked with "NOTICE: All refrigerants have been removed from this item, in accordance with 40 CFR 82.156(f). Supporting documentation is on file." The label on

the property indicates the refrigerant has been recovered prior to turn-in. (See Sample Labels below).

- Generating activity provides a signed statement/certificate stating the refrigerant has been removed (use DRMS Form 2016 or equivalent statement shown below). DRMS Form 2016 is available in Adobe Forms.
- The name and address of the person who recovered/removed the refrigerant.
- The date the refrigerant was recovered.
- Signed by the person turning-in appliance(s)/equipment.
- Retain statement/certificate of refrigerant removal for 3 years with the DTID.
- Technicians may initial and tag "drained" equipment - still require the signed certificate of refrigerant removal.
- Pass on copy of the signed certificate to scrap buyer or landfill operator.

Refrigerators are a regulated waste in Europe and are included on the disposal contracts. The disposal includes the draining of ODS.

Other situations/issues impacting turn-in of refrigeration equipment or appliances:

- USEPA Applicability Determinations Record Numbers 8 and 59, attached below, provide USEPA guidance for instances when the generating activity or the DRMO do not know by whom and when the refrigerant was removed (e.g., found on post, abandoned, damage in system, transport damage, damaged in scrap yard, etc.). The signed statement need not contain the name and address of the person who performed the recovery, as no such person exists. However, USEPA still requires, and the DRMO must get a signed and dated statement from a technician that clearly states that the refrigerant in the appliance that had not already leaked out has been recovered.
- Compressors removed from an appliance are still considered by USEPA as an appliance and must be managed as such. USEPA regulation 40 CFR 82.152 defines an appliance as any device which contains and uses a class I or class II substance as a refrigerant. See definitions below and USEPA Applicability Determinations Record Numbers 8 and 59 concerning removed compressors as appliances.
- Appliances from which some components of the refrigeration system have been removed, meet the definition of an appliance and must be managed as such.
- Appliances from which the entire refrigerant system has been removed. If the compressor or other refrigeration component(s)/systems containing the refrigerant have been removed from the appliance, the remaining appliance shell may be received as scrap, without a signed statement.
- The DRMO needs to be able to demonstrate to regulators that the compressor or other refrigeration components were removed prior to turn-in.
- The turn-in activity will annotate and sign the ETID/DTID with the words:
 - *"Compressor (or Refrigeration Components) Removed"*
- The appliance will be marked as:
 - *"Compressor (or Refrigeration Components) Removed"*
- If the compressor or the refrigeration components still contain the refrigerant, and are turned-in separately to the DRMO for RTDS, they must be treated as an item containing refrigerant, and marked as "NOTICE: CONTAINS REFRIGERANT. Per 40 CFR 82.156(f) Refrigerants must be recovered before final disposal of this item."
- If turned in as scrap, the refrigerant must be removed from the compressor or components, the item and DTID marked "NOTICE: All refrigerants have been removed from this item, in accordance with 40 CFR 82.156(f). Supporting documentation is on file.", and a signed statement provided to the DRMO, per guidance above.

Unless received as complete, new/unused units, this property is not authorized for receipt from DLA Depot Recycling Control Points (RCPs).